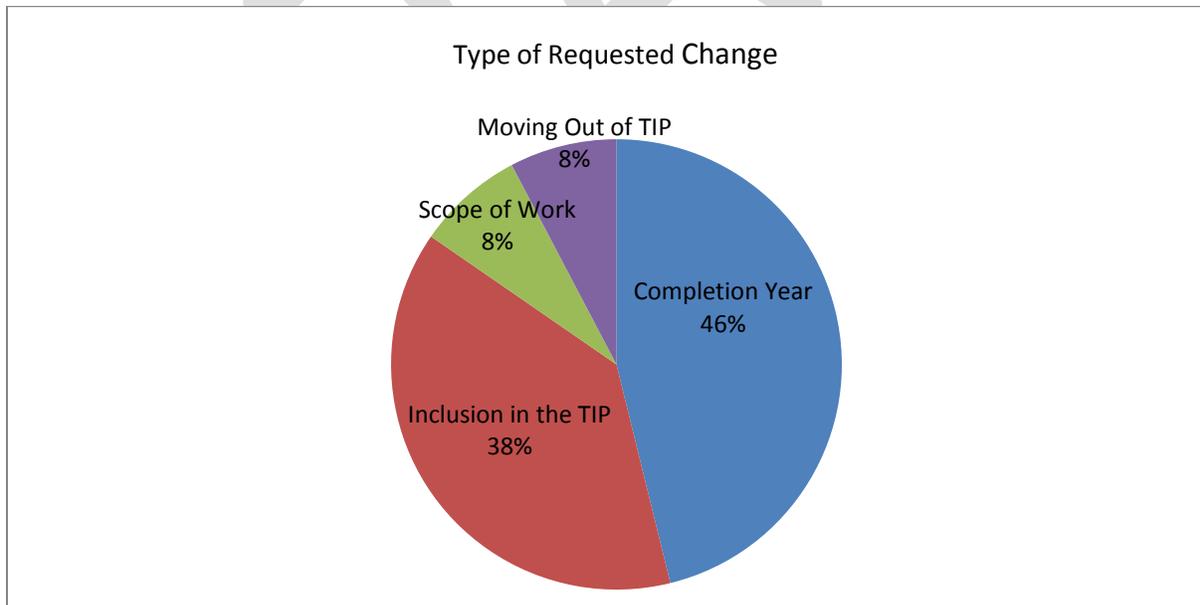




MEMORANDUM

To: CMAP Transportation Committee
Date: January 9, 2015
From: CMAP Staff
Re: GO TO 2040/TIP Conformity Analysis & TIP Amendments

In accordance with the biannual conformity analysis policy CMAP staff asked programmers to submit changes, additions, or deletions to non-exempt projects for inclusion in the regional air quality analysis of the Transportation Improvement Program (TIP) and GO TO 2040. Of the changes requested, thirteen (13) projects require air quality conformity analysis. Below is a summary of the types of requested changes.



If the TIP amendments are approved, five new non-exempt projects will be included in the TIP. These types of projects are included in the conformity analysis because funding for phases beyond preliminary engineering has been identified in the TIP. Non-exempt and exempt tested projects with only preliminary engineering funding are exempt from conformity analysis.

The new projects are:

- TIP ID [07-96-0013](#): Extending Joe Orr Rd from Burnham to the Indiana/Illinois state line.
- TIP ID [09-00-0033](#): Extending Bliss/Fabyan Rd.
- TIP ID [09-99-0102](#): Building the La Fox Rd Bypass.
- TIP ID [12-00-0035](#): A new bridge over the DesPlaines River and roadway alignment of the Caton-Bruce corridor from west of US 30 to IL 7 159th St.
- TIP ID [12-15-0002](#): Adding lanes to Bell Rd from 131st St to IL 7 159th St, while omitting the intersections of 151st St and 143rd St.

A request to remove all funding from the active years of the TIP for one project was received. This project will no longer be included in the conformity determination.

The project being removed from the conformity determination is:

- TIP ID [08-95-0024](#): Adding lanes on IL 83 from 31st St to I-55.

Scope changes have been requested for one existing project. The scope of a project is determined by the [work types](#) associated with the project.

- Non-exempt work types may affect air quality and must be tested for conformity. Examples of non-exempt work types are adding lanes to a road, an interchange expansion, signal timing and the major expansion of bus route service.
- Exempt tested work types do not require an air quality conformity analysis, but the region has chosen to include the impacts of projects including these work types in the travel demand model. Exempt tested projects include new commuter parking lots, rolling stock replacement, and road reconstruction with lane widening to standard (e.g., 10 feet to 12 feet).
- Exempt work types do not require an air quality conformity analysis. Examples of exempt work types are intersection improvements and rail station modernization.

The project for which a scope change has been requested is:

- TIP ID [10-09-0037](#): Reconstruction of the interchange at US 41 Skokie Highway and IL 176, including adding an auxiliary lane on the north/south component and an additional lane on IL 176 from IL 43 to the UP North line RR on the east/west portion.

The completion year indicates when a project is anticipated to be in service to users. The conformity analysis is conducted for selected analysis years between now and 2040. The analysis years are currently 2015, 2025, 2030 and 2040. If a change in completion year results in moving a project across an analysis year, the project must be included in a new conformity analysis. Sponsors indicated that several projects have updated completion years; six of those crossed an analysis year.

- TIP ID [07-11-0004](#): Grade separation of US 30 Lincoln Highway at Canadian National RR, the sponsor has requested moving the completion year from 2015 to 2017.
- TIP ID [08-00-0010](#): Adding lanes on IL 56 Butterfield Rd from IL 59 to Naperville Rd, the sponsor has requested moving the completion year from 2014 to 2016.
- TIP ID [08-11-0001](#): Grade separation of US 34 Ogden Ave at Canadian National RR, the sponsor has requested moving the completion year from 2015 to 2018.
- TIP ID [09-96-0018](#): Channelization of Stearns Rd at Randall Rd, the sponsor has requested moving the completion year from 2014 to 2017.
- TIP ID [12-06-0041](#): An extension of 143rd Street from IL 126 to Steiner Road, the sponsor has requested moving the completion year from 2014 to 2017.
- TIP ID [18-11-0046](#): A new station along the UP North Railroad at Peterson Ave and Ridge Ave, the sponsor has requested moving the completion year from 2015 to 2016.

Each TIP ID includes a hyperlink to the TIP database for further current project information. Changes being made to the project are shown in the attached report.

TIP projects are also viewable in a map format. The TIP map is available at <http://www.cmap.illinois.gov/programs-and-resources/tip/tip-data/tip-map>.

The 2015, 2025, 2030, and 2040 highway and transit networks were coded to include the project changes listed in the “Non-Exempt Projects Requiring Conformity Determination” report. The regional travel demand model was run using the updated networks. The resultant vehicle miles traveled (VMT) by vehicle class, speed, time of day, and facility type were entered into US Environmental Protection Agency’s MOVES model. The model generated on-road emission estimates for each precursor or direct pollutant in each analysis year.

For ozone precursors volatile organic compounds (VOC) and nitrogen oxides (NOx), the resulting emissions inventories estimates fell below the applicable budgets for the maintenance State Implementation Plan (SIP).

Both the annual direct fine particulate (PM_{2.5}) and NOx emissions inventories are below the applicable budgets from the attainment SIP.

Direct PM_{2.5} and NOx Emissions in Tons per Year for PM_{2.5} Conformity

Year	Fine Particulate Matter		Nitrogen Oxides	
	Northeastern Illinois	SIP Budget	Northeastern Illinois	SIP Budget
2015	2,632.51	5,100.00	58,897.75	127,951.00
2025	1,692.33	2,377.00	30,035.72	44,224.00
2030	1,615.67	2,377.00	27,958.80	44,224.00
2040	1,692.64	2,377.00	28,737.14	44,224.00

conformity is demonstrated by comparison of analysis year emissions to the SIP budgets

VOC and NOx Emissions in Tons per Summer Day for Ozone Conformity

Year	Volatile Organic Compounds		Nitrogen Oxides	
	Northeastern Illinois	SIP Budget	Northeastern Illinois	SIP Budget
2015	71.59	117.23	156.28	373.52
2025	48.54	60.13	77.16	150.27
2030	46.99	60.13	71.30	150.27
2040	49.85	60.13	72.99	150.27

conformity is demonstrated by comparison of analysis year emissions to the SIP budgets

Notes:

Off-model benefits are not included in the total emissions estimates

Results updated as of December 31, 2014